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HIGHWOOD WATER MANAGEMENT PLAN, PHASE 1


Public Advisory Committee

Information Bulletin

Edition 1, April 2002

Highwood Water Management Plan, Phase 1 What is it all about?

Changes in the Water Act and increasing demand for water has led to a need for changes in water management strategies for Alberta communities, particularly in southern Alberta where incidents of water shortages are frequent. The new Water Act along with the recently released Alberta Environment Framework for Water Management Planning provides policy and guidelines for making such changes. Key amongst these changes is the right to transfer licensed water use from one user to another within a river basin through a formal process administered under an approved basin water management plan.



Meeting Community Water Needs
& Protecting Aquatic Habitats

Such a water management plan defines guidelines for how transfers can occur. These guidelines must protect against potential environmental and socioeconomic third party damages that might result from water transfers. A water management plan should provide for water use strategies that lead to the sustainability of the basin water supply. As well it must protect the aquatic environments that provide this supply through the establishment of Water Conservation Objectives.

The development of a basin water management plan involves a public process where the various river basin communities are represented in a Public Advisory Committee (PAC). Such a committee was formed in February 2001 under the guidance of Alberta Environment to advise on the development of the Highwood Water Management Plan (HMP).

This HMP-PAC or herein referred to as PAC represents interested water user and fishery groups along with members from rural and urban municipalities and First Nations communities lying within the Highwood River, Little Bow River and Mosquito Creek basins.

To develop the HMP, Alberta Environment divided the public process into two phases. The current PAC has been selected to advise on the HMP Phase 1 component, which is primarily the development of a new Highwood Diversion Plan (HDP). This HDP defines operational guidelines for diversion of all licensed water use linked to the Highwood River, Little Bow River, and Mosquito Creek.

The diversion plan is required to comply with government water management regulations and policies as well as meet the objectives for an HDP as defined in the Joint Panel 1998 Decision Report.

The ultimate purpose of the HDP is to determine, within these constraints, when, where and how much water can be used from the three main streams now and in the near future. PAC is required, within these same constraints, to assess and place priorities on how much water is needed for community use and still leave sufficient water to maintain the environmental health of the streams that supply the water.

PAC is also required to assess if there is any way to save water from current use through implementation of non-storage options such as water license transfers, effluent recycling and improved mechanisms for water use efficiency or sharing. As well PAC is required to examine the need and potential for augmenting the existing water supply through such options as storage and pipeline transfers.

In its final analysis the PAC will make water management recommendations based on community-defined priorities for water management. PAC's mandate is to make these recommendations through a decision-making process that promotes consensual agreement among the PAC membership, and to acknowledge dissenting views where consensus can not be reached.

PAC intends to make these recommendations in consultation with communities in the Highwood, Little Bow and Mosquito Creek basins through use of open house sessions, as well as seek input from various water user sectors (e.g. agriculture, municipal, etc) of the community on specific water management options. PAC's progress is held accountable through the NRCB/CEAA Joint Review Panel and a summary of their latest progress review is provided in a News Release attached to this Bulletin.

PAC intends to keep the HMP development process transparent to the public by keeping the community updated on the issues and outcomes addressed in PAC through this Bulletin. Community feedback is encouraged so feel free to contact your community PAC member if you have questions about the HMP. If you did not receive a copy of this Bulletin in the mail and would like to get on the mailing list please send your request to Box 5631, High River, AB, TTV-1M7

PAC Representatives

Baker Creek/Women's Coulee
Coalition: *Stephen Evans, Norman Smith, Lisa Murphy

County of Vulcan & Towns of Vulcan, Carmangay & Champion: Dave Mitchell, Wayne Davies

First Nations:
Doreen Healy, Peter Snow

Fisheries Coalition: Alan Harvie, Kerrie Brewin

Industry:
Sharon Plett, Brad Walker

Little Bow Water Users Association:
Malcom MacDougall, Gary Flitton

Lower Mosquito Creek Water Users:
*Diana Andrews, Ron May

Lower Highwood Water Users:
*Gerald Porter

M.D. of Foothills & Ranchlands
Roy McLean, *Harry Riva Cambrin, Cam Gardner

M.D. of Willow Creek & Town of Staveland: Ian Sundquist

Stimson Creek Landowners:
Barbara Gardner

Tongue Creek Community Group:
Phil Bice, Colin & Karin Dumais, Maurice Walsh

Town of High River: Dan Campbell

Town of Nanton: Bill Szabon

Upper Little Bow Basin Water Users:
*Shirley Pickering, Lucille Akitt

*Denotes PAC Management Committee
Chairman: Shirley Pickering
Members: Diana Andrews, Stephen Evans, Gerald Porter & Harry Riva Cambrin

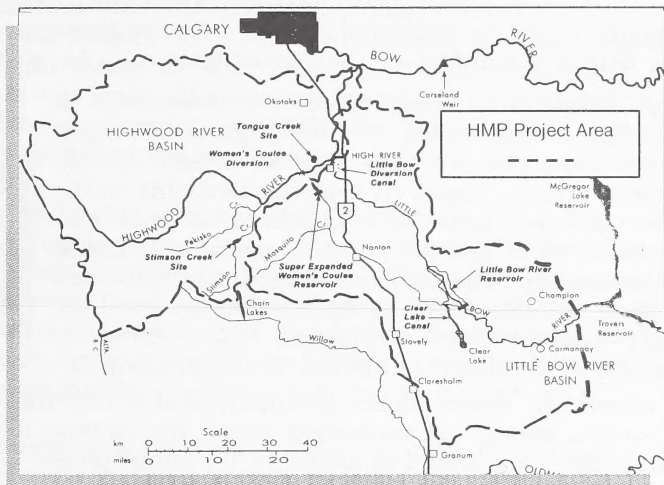


BACKGROUND: HIGHWOOD RIVER

An Imbalance between Water Supply and Demand

The Highwood River originates in the eastern slopes of the Rocky Mountains, and after joining with the Sheep River, empties into the Bow River south of Calgary. The river is a source of water for stock, irrigation, municipalities and industries, as well as habitat for a variety of aquatic life, including whitefish and rainbow trout. These fish spawn in the tributaries of the Highwood, and some are believed to move downstream to the Bow River. As with many mountain-fed rivers, a good deal of the Highwood's flow comes from snowmelt. Flows are heaviest from May to June, then taper off during the rest of the year. Beside seasonal variation, flows vary from year to year, depending on rainfall and the amount of snow in the mountains. In some years the river floods, in others flows are so low that some consumptive uses of water have to be curtailed.

The Highwood also provides water to two other streams via diversions at Women's Coulee (to Mosquito Creek) and at the Little Bow Diversion (to the Little Bow River) at High River. These two diversions are 70 to 100 years old and were constructed to augment streamflow in Mosquito Creek and the Little Bow River. Over the years, demand for the Highwood water increased. In the late 1970s and early 1980s, urban communities grew and industries like Cargill Foods



were locating in the Municipality of Foothills. There was also an increase in the demand for stock-watering and irrigation. Eventually, the demand for water in each of these sectors became so great that the provincial government placed a moratorium on any future water licenses in the Highwood, Little Bow and Mosquito Creek Basins. In essence, the demand had outstripped the supply in each of them. Nonetheless, licensed water demand had to be met because water licenses are legal rights for the use of water, and are based on a policy of "first-in-time, first-in-right." This means that those who hold the oldest licenses are entitled to all of the water that their license allows. Those with more junior licenses are subject to specific conditions that restrict the term of their use.

The Highwood fishery has survived over the years, adapting to periods of both high and low flows and increasing water demands. In low flow years in the 1980s these increased demands on the Highwood, combined with the contamination impacts of High River sewage outflows, resulted in significant fish kill events. At this time the Alberta Water Resources Commission, after holding public hearings throughout southern Alberta, concluded that the government establish an instream flow requirement for fish, and designated the Highwood River as the first place this should be done.

Meanwhile, water users and municipalities along the Little Bow began lobbying for a more secure supply of water in their region. A reservoir on the Little Bow River, they argued, could be filled by diverting water from the Highwood during the spring runoff period. This would secure their water supply and at the same time the Highwood fishery would be protected from large diversions of water during the late July and August low flow periods. The idea for a reservoir was adopted in principle by the provincial government, but approval for the project had to wait until the late 1990s, when the government established the Natural Resources Conservation Board. This Board was mandated to review all natural resource projects and determine whether they were in the public interest.

A NRCB/CEAA Joint Review Panel, representing the provincial and federal government, finally held hearings in the fall of 1997. It was asked, in addition to the Little Bow Reservoir, to approve a water diversion project to fill Clear Lake and the enlargement of the Little Bow Canal from 100 to 300 cubic feet per second capacity. A fourth component, the expansion of Women's Coulee Reservoir, and a Highwood Diversion Plan were deferred, pending further investigation. As part of this investigation, the Joint

Panel asked for a comparative site assessment of potential storage sites in the Highwood Basin (Super-Expanded Women's Coulee, Tongue Creek, Stimson Creek), based on evidence available to the Panel at that time that indicated storage was needed to meet present and future water demands in the system. The Panel requested that this work be done by June 1999. In April, 2000, a new Joint Panel held a public meeting in High River to consider a request by Alberta Transportation for



an extension. Based on the testimony at that meeting, the Panel ruled that the issue of off-stream storage be addressed within the context of a Highwood Water Management Plan (HMP) that would consider in its initial phase, a full range of options, including storage and non-storage, to meet existing and future water demands. The Panel granted an extension of 18 months (March 2002) to complete this work. Following a public meeting in December, 2001, the Panel granted a further extension of 6 months (to October, 2002) at the request of PAC.

Clearly there are no simple answers to a river system beset with more demands for water than it can supply. Off-stream storage can increase supply when flows diminish, but the cost of storage is high. Irrigators, whose livelihood depends on the water, have already cut back their use; can they still do more to reduce this demand? Growing intensive livestock operations need water. Can they reduce current water use and should this livestock growth be better controlled to reduce future demand? Towns, villages, and country residential development are rapidly growing and need more water to support their growth. Can they reduce their existing water use through water conservation methods, and can or should this growth also be curtailed? Finally, new environmental studies indicate that the Highwood fishery will demand more water to improve its habitat. Can this be done and still meet all these other growing community water needs? These are the types of problems that PAC faces and the HMP process provides opportunity to examine innovative solutions. Water will become increasingly valuable as our community grows because water is one thing we cannot do without!

News Release

Highwood Storage and Diversion Plan Joint Review Panel Issues Progress Report #4

Edmonton, March 7, 2002 -- The Highwood Storage and Diversion Plan Joint Review Panel today released a report that summarizes the results of a public meeting held in Okotoks on December 1, 2001 to review Alberta Transportation's comparative assessment of alternative storage sites and its progress in completing the proposed Highwood Storage and Diversion Plan by March 2002.

Alberta Transportation reported that, of the three potential storage sites it investigated, the Women's Coulee site was the best location for a reservoir because it would have the least effect on the environment and would be the most cost-effective. However, the department indicated that it would not undertake any additional field investigations of the sites until the Public Advisory Committee (PAC) for the Highwood Water Management Plan (HMP) has confirmed the need for storage.

The PAC reported having made considerable progress since September 2001, but noted that it had significant reservations about being able to complete Phase 1 of the HMP by March 2002. It proposed extending the deadline to October 31, 2002, with the need for storage being determined in June 2002. Most parties, including Alberta Transportation and Alberta Environment, supported the request for extending the deadline. Alberta Transportation also proposed that, in order to commence filling the new Little Bow River Reservoir in 2003, it would submit an interim operating plan on October 31, 2002.

The Panel agreed to the proposed extension noting that "the PAC fully understands the complexity of the tasks before it and has set out a work plan and schedule that it believes will allow it to systematically address these tasks in a way that does not overtax the volunteers who are committed to completing this work." The Panel also accepted that the Women's Coulee site represented the best site for storage within the Highwood basin, but indicated that it would rely on the results of the HMP before making a decision on the need for storage. The Panel expects the PAC to advise it as to the preferred timing of the next progress meeting.

The Panel was established jointly under the *Alberta Natural Resources Conservation Board Act* and the *Canadian Environmental Assessment Act* on March 22, 2000. The Panel's mandate is to examine the environmental, social and economic effects of developing offstream water storage in the Highwood River basin and proposed changes to the diversion plan for the Highwood River.

A previous joint review panel originally considered the issues of offstream storage and the diversion plan in 1997. However, the previous panel concluded in its report of June 1998 that, although additional offstream storage was required to address current and future water demands in the Highwood basin, there was insufficient information to consider these issues adequately. Consequently, Alberta Transportation (originally Alberta Public Works, Supply and Services) was asked to complete additional studies, as set out in NRCB Board Order 9601-1, within 12 months.

Copies of the June 2001 report are available from the NRCB, 4th Floor, Sterling Place, 9940 -106 Street, Edmonton, Alberta T5K 2N2, or by telephoning (780) 422-1977.

The Natural Resources Conservation Board (NRCB) provides a fair, open and impartial forum for Albertans to take part in the review of natural resource development projects such as forestry, recreational, water management and tourism projects.

The Canadian Environmental Assessment Agency administers the federal environmental assessment process, which identifies the environmental effects of proposed projects and measures to address them.

Information can be found on the NRCB's web site at www.nrcb.gov.ab.ca or on the Agency's web site.

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